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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,504	07/03/2003	Paul F. Lewis	027969-0114	4805

23524 7590 07/20/2005

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EXAMINER
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JOHNSON, JERRY D

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/613,504	Applicant(s) LEWIS ET AL.	
	Examiner Jerry D. Johnson	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 16-20, 25-30, 35-39, 41, 43 and 45-48 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-11, 16-20, 25-30, 35-39, 41-43 and 45-48 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
     1. ☐ Certified copies of the priority documents have been received.  
     2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-11, 16-20, 25-30, 35-39, 41, 43 and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al.

Li et al., U.S. Patent 6,485,794, teach lubricant compositions and their use, for example, to coat beverage containers or conveyor systems for beverage containers (column 1, lines 14-18). A variety of coating compositions can be used. The coating composition typically will include at least one film-forming ingredient that can be cured using thermal cure at less than 200° C. or radiation-induced cure (e.g., UV or visible light cure). Representative film formers are taught in column 3, lines 29+, including, *inter alia*, polyurethanes and resins comprising acrylic monomers, styrenic monomers or a mixture of acrylic and styrenic monomers. The film former usually represents up to about 99 wt. %, more preferably about 50 to about 97 wt. %, and most preferably about 70 to about 95 wt. % of the final coating weight (column 3, line 67 to column 4, line 3). The film former can be used by itself if it provides a sufficiently lubricious surface when cured. Typically, however, the film former will be combined with a liquid, semi-solid or solid lubricant that imparts lubricity to the cured lubricating coating (column 4, lines 4-8). Preferred lubricants include, *inter alia*, fluoropolymers and waxes. A preferred amount of lubricant is at least about 1 wt. %, more preferably about 3 to about 50 wt. %, and most preferably about 5 to about 30 wt. %, based on the weight of lubricant in the final cured coating (column 4, lines 36-42). The lubricant composition can include additional components to provide desired properties (column 5, lines 30-43). The containers can be made of a wide variety of materials including glasses, plastics, papers and ceramics (column 5, line 58 to column 6, line 4). While Li et al.

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differ from the instant claims in not requiring a hydrophobic polymer and at least one wax, it would have been obvious to one having ordinary skill in the art at the time the invention was made to follow the above teachings and arrive at the instantly claimed method, conveyor and container. Additionally, while Li et al. do not disclose the claimed coefficient of friction, it is noted that the coefficient of friction is an inherent property of the lubricant composition. Accordingly, the claimed coefficient would have been obvious because Li et al. teach the lubricant composition.

Claims 1-5, 10, 11, 18-20, 45, 46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 92/19505 in view of Li et al.

WO 92/19505 teach coating the exterior surface of a thermoplastic bottle with a protective layer of polyurethane (page 2, lines 12-14). For coating applications, a liquid diluent is usually present with the polyurethane to form a coating composition (page 7, lines 24-25). In addition to a diluent, the coating compositions will usually contain ingredients such as anti-oxidants, ultraviolet light absorbers, flow control agents, slip agents and anti-mar agents (page 8, lines 23-25). Typically, the coating composition is cured at a temperature of from about 20° to 60° C. for about 30 seconds to 4 hours (page 9, lines 23-24). In Examples 1 and 2, polyurethane coating compositions comprising wax are disclosed. While WO 92/19505 differ from the instant claims in teaching the claimed coefficient of friction, it is noted that the coefficient of friction is an inherent property of the lubricant composition. WO 92/19505 differs from the instant claims in teaching a container lubricant as opposed to a conveyor lubricant.

Li et al., U.S. Patent 6,485,794, teach lubricant compositions and their use, for example, to coat beverage containers or conveyor systems for beverage containers (column 1, lines 14-18).

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Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the lubricating coating of WO 92/19505 to a conveyor system for the transportation of containers because Li et al. teach that similar lubricant compositions to those taught by WO 92/19505 can be applied to container or conveyor surfaces to lubricate the passage of containers.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 45-48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the specification as filed for the now claimed limitation that "the cured substantially water-repellent, lubricating coating is formed without the need for crosslinking the hydrophobic polymer."

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17, 26 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17, 26 and 36 fail to further limit the claims from which they depend.

Applicant's arguments filed April 29, 2005 have been fully considered but they are not persuasive.

Applicants argue

Li fails to teach methods or compositions for lubricating conveyors wherein a curable composition is applied to a conveyor part and *non-thermally* and *non-radiatively* cured, as recited in independent claims 1, 18, 39 and 41. (Remarks, pages 8 and 9).

Applicants' argument lacks merit.

In column 7, lines 12-19, Li et al. teach that the lubricating composition may be cured by, *inter alia*, visible light and fluorescent lamps. Page 3, paragraph 13 of applicants' specification teaches that "a compositions is non-radiatively cured when the curing takes place at ambient room lighting conditions without the use of additional radiation sources such as ultraviolet lamps, infrared lamps, x-ray or gamma-ray sources. Accordingly, the compositions of Li et al. fully meet the claimed limitation of being non-thermally and non-radiatively cured.

Applicants argue "Li also fails to teach a lubricating composition comprising a mixture of a hydrophobic polymer and an alkali soluble resin." (Remarks, page 9).

Applicants' strained reading of Li et al. (e.g., "at least one film-forming ingredient is properly understood to refer to at least one entity intended to undergo a polymerization or crosslinking reaction"; "a careful reading of that sentence reveals that the "blends" refer to blends of urethane, acrylic, epoxy and melamine *monomers*, rather than polymers. This is made evident by the use of the word "copolymers" in the sentence") is without merit. As applicants acknowledge, Li et al. clearly teach "at least one film-forming ingredient". At least one means one or more. In any event, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to a mixture of film-forming ingredients based on their individually having been taught as useful in the composition.

Applicants argue

[e]ven if the Li [sic] did teach a lubricant composition containing two different polymers, as the Examiner seems to suggest, the Examiner has not established a prima facie case of obviousness for the selection of a hydrophobic polymer and an alkali soluble resin, as recited in claim 27 or for the selection [sic] a hydrophobic polymer having a number average molecular weight of at least about 30,000 and an alkali soluble resin having a number average molecular weight of no more than about 20,000, as recited in claim 37. (Remarks, pages 10 and 11).

Applicants' argument lacks merit.

There is no evidence that the claimed molecular weight is critical or gives unexpected results. Attorneys arguments unsupported by factual evidence do not take the place of objective evidence of unobviousness. *In re Lindner*, 173 USPQ 356.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

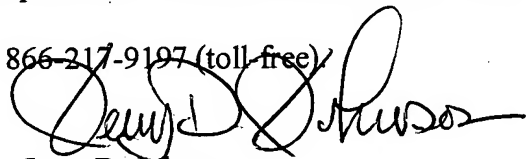
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (571) 272-1448. The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry D. Johnson  
Primary Examiner  
Art Unit 1764

jdj